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| EXAMINER | |
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| ZHU, BO HUI ALVIN | |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/891,103 | EYUBOGLU ET AL. | |
| | Examiner | Art Unit | |
| | BO HUI A. ZHU | 2419 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *14 January 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *8, 10 – 27, 35 – 48, 50 – 81, 83 – 93 and 95 – 132* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *8,10-27, 35-48, 50-81, 83-93 and 95-107, 109-118, 120-125 and 127-132* is/are rejected.

7)☒ Claim(s) *108,119 and 126* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Response to Amendment*

1. The amendment filed on January 14, 2009 has been entered.

Claims 8, 10 – 27, 35 – 48, 50 – 81, 83 – 93 and 95 – 132 are pending.

Claims 8, 10 – 27, 35 – 48, 50 – 81, 83 – 93 and 95 – 107, 109 – 118, 120 – 125, and 127 - 132 are rejected.

Claims 108, 119 and 126 are objected to as being dependent upon a rejected base claim.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 96 – 98, 113 – 120 and 129 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 96 – 98, 113 – 120 and 129 recite a computer-readable medium that stores executable instructions. This is a lack of enablement for this subject matter in the specification. Thus one skilled in the art would not be enabled to make and/or use the invention.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 17, 36, 53, 67 - 69, 74, 78 - 81, 87, 91 - 94, 100, 102, 110, 111, 121 and 130 are rejected under 35 U.S.C. 103(a) as being unpatentable over ZIV. Noam, A. (WO 98/09460) in view of Lim et al. (US 7,035,636).

(1) with regard to claims 17, 36, 53, 68, 69, 74, 78, 80, 81, 87, 91 - 94, 100, 110 and 111:

ZIV discloses a method comprising: enabling many-to-many communication among radio network controllers (BSCs, 12A – 12C and 22A – 22C in Fig. 2) and radio nodes (BTSs, 14A – 14I and 24A – 24I in Fig. 2) through a packet network (CIS, 26 in Fig. 2); establishing a first session for a first access terminal on a first radio network controller through a first radio node when the first access terminal is in a coverage area of the first radio node (e.g. when a remote unit 34 is in the coverage area of radio node 14E, a session has to be established on BSC 12B for managing the remote unit); maintaining the first session on the first radio network controller as the first access terminal moves from the coverage area of the first radio node to any portion of a coverage area of a second radio node (when a remote unit 34 moves from the coverage area of 14E to the coverage are of 14A, the remote unit can still transmit and receive data through BSC 12B, thus the session of 34 on BSC 12B is maintained; see page 6,

line 5 – page 7, line 7) through which a second dormant access terminal has a second session on a second radio network controller (a session exists between a remote unit and radio network controller 12A when the remote unit is in the coverage area of radio node 14A and transmits and receives data through BSC 12A), wherein the first session is maintained when the first access terminal is dormant (the session is maintained even when there is no user data traffic as controlling/signaling data inherently exists for managing the remote units); wherein when the first access terminal is dormant, the first access terminal has the first session established on the first radio network controller and does not have any traffic channel established with any radio network controller (even when no user data to transmit or receive, a session is required for transmitting and receiving any inherent controlling/signaling data); wherein when the second access terminal is dormant, the second access terminal has the second session established on the second radio network controller and does not have any traffic channel established with any radio network controller (even when no user data to transmit or receive, a session is required for transmitting and receiving any inherent controlling/signaling data).

ZIV does not disclose the access terminal having a session established on a radio network controller when the access terminal is dormant.

Lim et al. teaches an access terminal having a session established on a radio network controller when the access terminal is dormant (e.g. column 6, lines 13 – 61).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of ZIV to include the feature of the access

terminal having a session established on a radio network controller when the access terminal is dormant as shown in Lim et al. in order to make handoff process more efficient.

(2) with regard to claims 67, 79 and 130:

ZIV discloses a method and system, comprising: enabling a first radio node (14A on Fig. 2) to simultaneously serve both a first access terminal (e.g. a remote terminal that is inside the coverage area of BTS 14A) and a second access terminal (another remote terminal inside the coverage area of BTS 14A), the first access terminal having a first session established on a first radio network controller (12A on Fig. 2) and the second access terminal having a second session established on a second radio network controller (BSC 12B on Fig. 2; see page 6, line 31 – page 7, line 7), the radio node being interconnected with the radio network controllers using a packet network (26 on Fig. 2); wherein the radio node is enabled to simultaneously serve both the first access terminal and the second access terminal (all BTS can simultaneously serve multiple remote terminals e.g. transmit control/signal information to the remote terminals); wherein when the first access terminal is dormant, the first access terminal has the first session established on the first radio network controller and does not have any traffic channel established with any radio network controller (even when no user data to transmit or receive, a session is required for transmitting and receiving any inherent controlling/signaling data); wherein when the second access terminal is dormant, the second access terminal has the second session established on the second radio network controller and does not have any traffic channel established with any

radio network controller (even when no user data to transmit or receive, a session is required for transmitting and receiving any inherent controlling/signaling data).

ZIV does not disclose the access terminal having a session established on a radio network controller when the access terminal is dormant.

Lim et al. teaches an access terminal having a session established on a radio network controller when the access terminal is dormant (e.g. column 6, lines 13 – 61).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of ZIV to include the feature of the access terminal having a session established on a radio network controller when the access terminal is dormant as shown in Lim et al. in order to make handoff process more efficient.

(3) with regard to claims 102 and 121:

ZIV discloses a system and method, comprising: at a radio node in communication with a first radio network controller (12A on Fig. 2) and a second radio network controller (12B on Fig. 2) through a packet network (26 on Fig. 2) that enables many-to-many communication, routing access channel packets received from an access terminal (34 on Fig. 2) to a selected one of either the first radio network controller or the second radio network controller.

ZIV however does not teach using Internet protocol address for addressing radio network controllers.

The Examiner takes Official Notice that the use of the Internet protocol and Internet protocol address is well known in the art and it would have been desirable to

use it because it is readily accessible and widely used in the industry thus makes it cost effective to implement. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use Internet protocol addresses.

6. Claims 8, 10 – 27, 35, 37 – 44, 48, 50 - 52, 54, 56 – 66, 70 – 73, 75, 76, 83 – 86, 88, 89, 92, 93, 95, 98, 99, 101, 103, 105 – 107, 109, 112, 113, 122 – 125 and 128 are rejected under 35 U.S.C. 103(a) as being unpatentable over ZIV. Noam, A. (WO 98/09460) in view of Lim et al. (US 7,035,636) and further in view of the admitted prior art (Fig. 1 and 2).

(1) with regard to claim 37, 95, 98 and 101:

ZIV does not disclose sending an access channel message. The admitted prior art discloses sending an access channel message (page 5, lines 15 – 18). It would have been desirable to send an access channel message from the first access terminal to the first radio network controller through the second radio node because it would help establish connection between the access terminal and the radio network controller. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to send an access channel message in the system of ZIV.

(2) with regard to claim 38, 54, 70 and 83:

ZIV does not disclose signaling between the first radio network controller and the second radio network controller. The admitted prior art teaches signaling between the first radio network controller and the second radio network controller (page 5, lines 3 – 18). It would have been desirable to use signaling between the first radio network

controller and the second radio network controller because it would make handoff procedure between two radio network controller more efficient. Therefore, it would have been obvious to on e of ordinary skill in the art at the time of the invention to use signaling between two radio network controllers in the system of ZIV.

(3) with regard to claims 39, 51, 71, 84, 56, 106 and 123:

ZIV discloses using packet routing technique for routing packets, however, does not teach using Internet protocol and Internet protocol address for routing packets. The Examiner takes Official Notice that the use of the Internet protocol and Internet protocol address for routing packets is well known in the art. It would have been desirable to use the Internet protocol because it is well known and readily accessible in the industry. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the Internet protocol in the system of ZIV.

(4) with regard to claims 40, 72, 85 and 103:

ZIV does not disclose using a session identifier. The admitted prior art teaches using a session identifier (Universal Access Terminal Identifier (UATI)). It would have been desirable to use a session identifier because it would make the handoff process more efficient. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to use a session identifier in the system of ZIV.

(5) with regard to claims 41, 18, 73, 86, 105 and 122:

ZIV does not disclose storing in the second radio node information to map a session identifier of the first access terminal to an Internet protocol address of the first radio network controller, using the stored information at the second radio node to

determine the Internet protocol address of the first radio network controller using a session identifier included in an access channel message received from the first access terminal.

The admitted prior art teaches storing information to map a session identifier of the first access terminal to an Internet protocol address of the first radio network controller, using the stored information to determine the Internet protocol address of the first radio network controller using a session identifier included in an access channel message received from the first access terminal (Session/Mobility Manager, 52 and 53 on Fig. 2; see page 4 line 5 – page 6 line 15).

It would have been desirable to storing information to map a session identifier of the first access terminal to an Internet protocol address of the first radio network controller and using the stored information to determine the Internet protocol address of the first radio network controller using a session identifier included in an access channel message received from the first access terminal because it would make the handoff procedure of the access terminal efficient. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use this method in the system of ZIV.

(6) with regard to claim 52:

ZIV discloses each of the radio network controllers and each of the radio nodes are associated with a single subnetwork (see Fig. 2, each network controllers 12A – 12C and each radio nodes 14A – 14I are associated with a single subnetwork). (7) with regard to claims 12 and 112:

ZIV discloses traffic channel radio resourced are managed in the first and second radio nodes and the first or second radio network controller requests radio resources from the first or second radio node before adding any of its sectors to a traffic channel (since 14A can connect the remote terminals within its coverage area to 12A or 12B or 12C, it must be able to manage radio resource for the traffic, and the controller must be connected to 14A in order to set up a channel).

(8) with regard to claim 14:

ZIV discloses the first session is transferred from the first radio network controller in one subnetwork to another radio network controller in another subnetwork based upon a predetermined criterion (12A and 14A – 14C is one subnetwork since 12A under normal circumstance supports 14A – 14C; 12B and 14D – 14F is another subnetwork).

(9) with regard to claim 15:

ZIV discloses the session transfer is triggered by the first access terminal upon detection of a subnetwork change (when remote terminal 34 move from the coverage area of 12A to the coverage area of 12B or 12C).

(10) with regard to claim 16:

ZIV discloses the session transfer is triggered by a radio network controller (in the case when the one controller has reached maximum capacity, another controller is used).

(11) with regard to claims 19, 20, 23 – 25, 88 and 89:

ZIV does not disclose a RNC resource control agent. The admitted prior art discloses a RNC resource control agent (see page 5, line 3 – page 6, line 15). It would

have been desirable to have a RNC resource control agent as taught by the admitted prior art because it would make the handoff procedure of the access terminal efficient. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use this method in the system of ZIV.

(12) with regard to claims 26 and 27:

ZIV does not disclose the radio network controllers include a PDSN function that includes Simple IP, Mobile IP and AAA client functions. The admitted prior art teaches a PDSN function that includes Simple IP, Mobile IP and AAA client functions (PDSN on Fig. 1 and 2). It would have been desirable to have a PDSN function because it provides efficient mobility management. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use a PDSN function as taught by the admitted prior art in the system of ZIV.

(13) with regard to claims 22, 43, 75, 107 and 124:

ZIV disclose selecting the radio network controller based on at least on the loading of the first and second radio network controllers (page 6, lines 31 – 35).

(14) with regard to claims 21, 44, 76, 109, 125 and 128:

ZIV discloses selecting the radio network controller based on at least on the routing distance between the radio node and the first and second radio network controllers (Fig. 1 and 2, the default controller for radio nodes 14A – 14C is 12A, for 14D – 14F is 12B, 14G – 14I is 12C, etc. based on routing distances).

(15) with regard to claims 35, 42, 48, 50 57, 58, 59, 8, 13, 10, 11, 60 – 66 and 99:

ZIV further discloses establishing a first traffic channel between the first access terminal and the first radio network controller of the network through the first radio node when the first access terminal is in the coverage area of the first radio node (when remote unit 34 is in the coverage area of a first radio node 14E, a first traffic channel between the remote unit and a first radio network controller 12B is established through the first radio node 14E); establishing a second traffic channel between a second access terminal and a second radio network controller of the network through a second radio node when the second access terminal is in a coverage area of the second radio node (when the remote unit 34 or another remote unit is in the coverage area of a second radio node for example 14A, a second traffic channel between the remote unit and a second radio network controller 12A is established through the first radio node 14A); maintaining the first traffic channel without requiring the first traffic channel to pass through another radio network controller when the first access terminal moves from the coverage area of the first radio node to any portion of the coverage area of the second radio node (when a remote unit moves from the coverage area of 14E to the coverage are of 14A, the remote unit can still be using 12B and no passing through of another radio network controller; see page 6, line 5 – page 7, line 7).

7. Claims 45 – 47, 55, 77, 90, 104 and 127 are rejected under 35 U.S.C. 103(a) as being unpatentable over ZIV. Noam, A. (WO 98/09460) in view of Lim et al. (US 7,035,636).and the admitted prior art (Fig. 1 and 2) and further in view of Yucebay (US 5,983,282).

(1) with regard to claim 45:

ZIV does not disclose employing a chassis-based hardware platform with multiple server cards to implement each of the first and second radio network controller. Yucebay teaches a chassis-based hardware platform with multiple server cards to implement each of the first and second radio network controllers (column 10, lines 20 – 26). It would have been desirable to have a chassis-based hardware platform with multiple server cards to implement each of the first and second radio network controllers because it would allow the controller to ability to support multiple networks. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the teaching of Yucebay in the system of ZIV.

(2) with regard to claim 46:

ZIV does not disclose and routing incoming packets to server cards based on session identifier using an I/O card. The Examiner takes Official Notice that it is well known in the art that any switch or router commonly used in the industry have the functionality of routing incoming packets based on session identifiers using I/O cards (line cards or router ports of the router). It would have been desirable to route packets based on session identifier using an I/O card because this method is readily accessible and well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to route incoming packets based on session identifier using an I/O card in the system of ZIV.

(3) with regard to claims 47, 55, 77, 90, 104 and 127:

ZIV does not disclose the session identifier comprises 1xEV-DO UATI. The admitted prior art teaches using 1xEV-DO UATI (page 2, line 27). It would have been desirable to use 1xEV-DO because it is well known in the art and readily accessible thus makes it cost effective. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use 1xEV-DO in the system of ZIV.

8. Claims 96, 97, 113 and 129 are rejected under 35 U.S.C. 103(a) as being unpatentable over ZIV. Noam, A. (WO 98/09460) in view of Lim et al. (US 7,035,636) and further in view of Langberg et al. (US 5,852,630).

(1) with regard to claims 96 and 97:

ZIV discloses a method and system, comprising: enabling many-to-many communication among radio network controllers (BSCs, 12A – 12C and 22A – 22C in Fig. 2) and radio nodes (BTSs, 14A – 14I and 24A – 24I in Fig. 2) through a packet network (CIS, 26 in Fig. 2); establishing a first traffic channel between a first access terminal and a first radio network controller of the network through a first radio node when the first access terminal is in a coverage area of the first radio node (when remote unit 34 is in the coverage area of a first radio node 14E, a first traffic channel between the remote unit and a first radio network controller 12B is established through the first radio node 14E); establishing a second traffic channel between a second access terminal and a second radio network controller of the network through a second radio node when the second access terminal is in a coverage area of the second radio node (when the remote unit 34 or another remote unit is in the coverage area of a second

radio node for example 14A, a second traffic channel between the remote unit and a second radio network controller 12A is established through the first radio node 14A); maintaining the first traffic channel without requiring the first traffic channel to pass through another radio network controller when the first access terminal moves from the coverage area of the first radio node to any portion of the coverage area of the second radio node (when a remote unit moves from the coverage area of 14E to the coverage are of 14A, the remote unit can still be using 12B and no passing through of another radio network controller; see page 6, line 5 – page 7, line 7).

ZIV does not disclose the access terminal having a session established on a radio network controller when the access terminal is dormant.

Lim et al. teaches an access terminal having a session established on a radio network controller when the access terminal is dormant (e.g. column 6, lines 13 – 61).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of ZIV to include the feature of the access terminal having a session established on a radio network controller when the access terminal is dormant as shown in Lim et al. in order to make handoff process more efficient.

ZIV however does not teach using a computer-readable medium that stores executable instructions for performing the method above.

Langberg et al. teaches a method for a transceiver warm start activation procedure can be implemented in software stored in a computer-readable medium. The computer-readable medium is an electronic, magnetic, optical, or other physical device

or means that can contain or store a computer program for use by or in connection with a computer-related system or method (column 3, lines 51-65). Using a computer readable medium with program instruction code would be desirable because it would perform the same function of using hardware but offer the advantage of less expense, adaptability and flexibility. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the limitation as taught by Langberg et al. into the system of ZIV so as to reduce cost and improve the adaptability and flexibility of the logic simulation.

(2) with regard to claim 129:

ZIV discloses a method and system, comprising: simultaneously serve both a first access terminal (e.g. a remote terminal that is inside the coverage area of BTS 14A) and a second access terminal (another remote terminal inside the coverage area of BTS 14A), the first access terminal having a first session established on a first radio network controller (12A on Fig. 2) and the second access terminal having a second session established on a second radio network controller (BSC 12B on Fig. 2; see page 6, line 31 – page 7, line 7), the radio node being interconnected with the radio network controllers using a packet network (26 on Fig. 2); wherein the radio node is enabled to simultaneously serve both the first access terminal and the second access terminal when the first access terminal is dormant (all BTS can simultaneously serve multiple remote terminals e.g. transmit control/signal information to the remote terminals); wherein when the first access terminal is dormant, the first access terminal has the first session established on the first radio network controller and does not have any traffic

channel established with any radio network controller (even when no user data to transmit or receive, a session is required for transmitting and receiving any inherent controlling/signaling data); wherein when the second access terminal is dormant, the second access terminal has the second session established on the second radio network controller and does not have any traffic channel established with any radio network controller (even when no user data to transmit or receive, a session is required for transmitting and receiving any inherent controlling/signaling data).

ZIV does not disclose the access terminal having a session established on a radio network controller when the access terminal is dormant.

Lim et al. teaches an access terminal having a session established on a radio network controller when the access terminal is dormant (e.g. column 6, lines 13 – 61).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of ZIV to include the feature of the access terminal having a session established on a radio network controller when the access terminal is dormant as shown in Lim et al. in order to make handoff process more efficient.

ZIV however does not teach using a computer-readable medium that stores executable instructions for performing the method above.

Langberg et al. teaches a method for a transceiver warm start activation procedure can be implemented in software stored in a computer-readable medium. The computer-readable medium is an electronic, magnetic, optical, or other physical device or means that can contain or store a computer program for use by or in connection with

a computer-related system or method (column 3, lines 51-65). Using a computer readable medium with program instruction code would be desirable because it would perform the same function of using hardware but offer the advantage of less expense, adaptability and flexibility. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the limitation as taught by Langberg et al. into the system of ZIV so as to reduce cost and improve the adaptability and flexibility of the logic simulation.

(3) with regard to claim 113:

ZIV further discloses routing access channel packets received from an access terminal (34 on Fig. 2 is being viewed as a third access terminal) to a selected one of either the first radio network controller or the second radio network controller.

ZIV however does not teach using Internet protocol address for addressing radio network controllers.

The Examiner takes Official Notice that the use of the Internet protocol and Internet protocol address is well known in the art and it would have been desirable to use it because it is readily accessible and widely used in the industry thus makes it cost effective to implement. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use Internet protocol addresses.

9. Claims 98 and 114 – 118 and 120 are rejected under 35 U.S.C. 103(a) as being unpatentable over ZIV. ZIV, A. (WO 98/09460) in view of Lim et al. (US 7,035,636) and

Langberg et al. (US 5,852,630) and further in view of the admitted prior art (Fig. 1 and 2).

(1) with regard to claim 98:

ZIV does not disclose receiving an access channel message. The admitted prior art discloses receiving an access channel message (page 5, lines 15 – 18). It would have been desirable to receive an access channel message from the first access terminal to the first radio network controller through the second radio node because it would help establish connection between the access terminal and the radio network controller. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to receive an access channel message in the system of ZIV.

(2) with regard to claim 114:

ZIV discloses using packet routing technique for routing packets, however, does not teach using Internet protocol and Internet protocol address for routing packets. The Examiner takes Official Notice that the use of the Internet protocol and Internet protocol address for routing packets is well known in the art. It would have been desirable to use the Internet protocol because it is well known and readily accessible in the industry. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the Internet protocol in the system of ZIV.

(3) with regard to claim 115:

ZIV does not disclose the session identifier comprises 1xEV-DO UATI. The admitted prior art teaches using 1xEV-DO UATI (page 2, line 27). It would have been desirable to use 1xEV-DO because it is well known in the art and readily accessible

thus makes it cost effective. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use 1xEV-DO in the system of ZIV.

(4) with regard to claim 116:

ZIV does not disclose storing in the second radio node information to map a session identifier of the first access terminal to an Internet protocol address of the first radio network controller, using the stored information at the second radio node to determine the Internet protocol address of the first radio network controller using a session identifier included in an access channel message received from the first access terminal. The admitted prior art teaches storing information to map a session identifier of the first access terminal to an Internet protocol address of the first radio network controller, using the stored information to determine the Internet protocol address of the first radio network controller using a session identifier included in an access channel message received from the first access terminal (Session/Mobility Manager, 52 and 53 on Fig. 2; see page 4 line 5 – page 6 line 15).

It would have been desirable to storing information to map a session identifier of the first access terminal to an Internet protocol address of the first radio network controller and using the stored information to determine the Internet protocol address of the first radio network controller using a session identifier included in an access channel message received from the first access terminal because it would make the handoff procedure of the access terminal efficient. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use this method in the system of ZIV.

(5) with regard to claim 117:

ZIV discloses using packet routing technique for routing packets, however, does not teach using Internet protocol and Internet protocol address for routing packets. The Examiner takes Official Notice that the use of the Internet protocol and Internet protocol address for routing packets is well known in the art. It would have been desirable to use the Internet protocol because it is well known and readily accessible in the industry. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the Internet protocol in the system of ZIV.

(6) with regard to claim 118:

ZIV disclose selecting the radio network controller based on at least on the loading of the first and second radio network controllers (page 6, lines 31 – 35)..

(7) with regard to claims 120:

ZIV discloses selecting the radio network controller based on at least on the routing distance between the radio node and the first and second radio network controllers (Fig. 1 and 2, the default controller for radio nodes 14A – 14C is 12A, for 14D – 14F is 12B, 14G – 14I is 12C, etc. based on routing distances).

10. Claims 131 and 132 are rejected under 35 U.S.C. 103(a) as being unpatentable over ZIV. Noam, A. (WO 98/09460) in view of Lim et al. (US 7,035,636) and further in view of Yahagi (US 6,477,159).

(1) with regard to claim 131:

ZIV further discloses establishment of the first session follows powering on of the first access terminal (inherent in ZIV as remote units must be powered on to be able to operate with its controlling BSC).

ZIV does not disclose the establishment of the first session permits establishment of a first traffic channel between the first access terminal and the first network controller of the network when the first access terminal is no longer dormant.

Yahagi teaches establishment of a session permits establishment of a first traffic channel between an access terminal and a network controller when the first access terminal is not dormant (see column 8, lines 1 – 18; an access channel between a base station and a mobile terminal enables establishment of a traffic channel).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of ZIV so that the session includes an access channel that enables establishment of traffic channels between the remote unit and the BSC as shown in Yahagi in order to reduce processing burden in managing the remote units when the remote units move from one base station to another.

(2) with regard to claim 132:

ZIV does not disclose the first traffic channel is established in response to a connection request message sent by the first access terminal.

Yahagi teaches the first traffic channel is established in response to a connection request message sent by the first access terminal (column 8, lines 3, i.e. call connection requests sent by mobile terminals to base station).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of ZIV so that the session includes an access channel that allows establishment of traffic channels for the remote units in response to a connection request message send by the remote units as shown in Yahagi in order to reduce processing burden in managing the remote units when the remote units move from one base station to another.

### *Allowable Subject Matter*

11. Claims 108, 119 and 126 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### *Response to Arguments*

12. Applicants' arguments with respect to claims 36, 67, 79, 80, 92, 93, 97, 100, 129 and 130 have been fully considered but they are moot in view of the new ground(s) of rejection.

13. Regarding the rejections of claims 96 – 98, 113 – 120 and 129 under 112 1st paragraph for failing to comply with the enablement requirement, Applicants contend that a person having ordinary skill in the art would be enabled to make and/or use the invention because a person having ordinary skill in the art would have general knowledge of computers and computing devices, and would likewise have general

knowledge of computer-readable media, such as memory (Remarks, page 30 of 39). Examiner respectfully disagrees. The specification discloses only a statutory hardware system/method and provides no support for such hardware system/method can be or may be performed or substituted by combinations of software and hardware. As a result, all claims referred to such inadequately supported options are rejected under 112 1st paragraph for failing to comply with the enablement requirement.

## *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BO HUI A. ZHU whose telephone number is (571)-270-1086. The examiner can normally be reached on Mon-Thu 10am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571)-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/B. A. Z./
Examiner, Art Unit 2419

/JAYANTI K PATEL/
Supervisory Patent Examiner, Art Unit 2419